	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition	Errors
1	BRS	L1	4934	gelatin same human	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/19 11:27			0
2	BRS	L2	77	gelatin near human	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/19 11:27			0
3	BRS	L3	6	human adj gelatin	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/19 11:27			0
4	BRS	L4	0	(2 or 3) same kda	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/19 11:29			0
5	BRS	L5	333	bloom adj strength	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/19 11:28			0
6	BRS	L6	0	(2 or 3) same 5	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/19 11:29			0
7	BRS	L7	119213	gelatin	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/19 11:29			0
8	BRS	L8	113	7 same Hydroxylat$3	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/19 11:30			0
9	BRS	L9	0	8 same percent$3	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/19 11:31			0

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition	Errors
10	BRS	L10	0	(2 or 3) same non-hydroxylat$3	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/19 11:43			0
11	BRS	L11	84	gelatin adj polypeptide	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/19 11:32			0
12	BRS	L12	6	11 same (mixture or homogeneous)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/19 11:33			0
13	BRS	L13	7	(2 or 3) same (heterogeneous or mixture)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/19 11:46			0
14	BRS	L14	7	(2 or 3) same collagen	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/19 11:52			0
15	BRS	L15	25	(2 or 3) same composition	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/19 11:59			0
16	BRS	L16	12084	endotoxin	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/19 11:59			0
17	BRS	L17	32	7 same 16	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/19 12:00			0
18	BRS	L18	72525	(binding adj agent) or (encapsulant) or (stabilizing adj agent)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/19 12:25			0

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition	Errors
19	BRS	L19	1563286	(binding adj agent) or encapsulant or (stabilizing adj agent) or (filming adj forming agent) or (moisturizing adj agent) or emusifier or (thickening adj agent) or (gelling adj agent) or (colloidal adj agent)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/19 12:27			0
20	BRS	L20	123814	(adhesive adj agent) or (hard adj gel adj capsule) or (soft adj gel adj capsule) or (plasma adj expander) or colloidal or (graft adj coating) or (medical adj sponge) or (medical adj plug) or (micro adj carrier)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/19 12:28			0
21	BRS	L21	21705	(edible adj composition) or (protein adj supplement) or (fat adj substitute) or (nutritional adj supplement) or (edible adj coating) or (photographic adj composition) or (cosmetic adj composition) or (industrial adj composition) or (cell adj culture adj composition)or (laboratory adj composition)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/19 12:30			0

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments	Error Definition	Errors
22	BRS	L22	31	(2 or 3) same (19 or 20 or 21)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/03/19 12:30			0

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FILE 'HOME' ENTERED AT 12:57:53 ON 19 MAR 2003

=> file medline caplus biosis embase scisearch agricola
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                     0.21       0.21

FILE 'MEDLINE' ENTERED AT 12:58:13 ON 19 MAR 2003

FILE 'CAPLUS' ENTERED AT 12:58:13 ON 19 MAR 2003
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FILE 'SCISEARCH' ENTERED AT 12:58:13 ON 19 MAR 2003
COPYRIGHT (C) 2003 Institute for Scientific Information (ISI) (R)

FILE 'AGRICOLA' ENTERED AT 12:58:13 ON 19 MAR 2003

=> s human gelatin
L1           70 HUMAN GELATIN

=> s human (a) gelatin
   4 FILES SEARCHED...
L2          102 HUMAN (A) GELATIN

=> s l1 or l2
L3          102 L1 OR L2

=> s kda (p) 3
L4       124357 KDA (P) 3

=> s l3 (p) kda
L5           11 L3 (P) KDA

=> duplicate remove l5
DUPLICATE PREFERENCE IS 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH'
KEEP DUPLICATES FROM MORE THAN ONE FILE?  Y/(N):n
PROCESSING COMPLETED FOR L5
L6             4 DUPLICATE REMOVE L5 (7 DUPLICATES REMOVED)

=> d l6 1-4 ibib abs

L6   ANSWER 1 OF 4     MEDLINE                              DUPLICATE 1
ACCESSION NUMBER:   2002113136     MEDLINE
DOCUMENT NUMBER:    21671926   PubMed ID: 11812234
TITLE:              Recombinant expression and purification of an enzymatically
                    active cysteine proteinase of the protozoan parasite
                    Entamoeba histolytica.
AUTHOR:             Hellberg A; Nowak N; Leippe M; Tannich E; Bruchhaus I
CORPORATE SOURCE:   Bernhard Nocht Institute for Tropical Medicine, Bernhard
                    Nocht Strasse 74, 20359 Hamburg, Germany.
SOURCE:             PROTEIN EXPRESSION AND PURIFICATION, (2002 Feb) 24 (1)
                    131-7.
                    Journal code: 9101496. ISSN: 1046-5928.
PUB. COUNTRY:       United States
DOCUMENT TYPE:      Journal; Article; (JOURNAL ARTICLE)
LANGUAGE:           English
FILE SEGMENT:       Priority Journals
ENTRY MONTH:        200210
ENTRY DATE:         Entered STN: 20020216
                    Last Updated on STN: 20021004
                    Entered Medline: 20021003
```

AB Cysteine proteinases and in particular cysteine proteinase 5 (EhCP5) of Entamoeba histolytica are considered important for ameba pathogenicity. To study EhCP5 in more detail a protocol was elaborated to produce considerable amounts of the enzyme in its active form. The protein was expressed in Escherichia coli as a histidine-tagged pro-enzyme and purified to homogeneity under denaturing conditions in the presence of guanidine-HCl using nickel affinity chromatography. Renaturation was performed by 100-fold dilution in a buffer containing reduced and oxidized thiols, which led to soluble but enzymatically inactive pro-enzyme. Further processing and activation was achieved in the presence of 10 mM DTT and 0.04% SDS at 37 degrees C. Recombinant enzyme (rEhCP5) was indistinguishable from native EhCP5 purified from E. histolytica lysates. Both runs in SDS-PAGE under reducing and nonreducing conditions at positions corresponding to 27 and 29 ***kDa*** , respectively, had the same pH optima and displayed similar specific activity against azocasein. Moreover, both enzymes were active against a broad spectrum of biological and synthetic substrates such as mucin, fibrinogen, collagen, human hemoglobin, bovine serum albumin, ***gelatin*** , ***human*** IgG, Z-Arg-Arg-pNA, and Z-Ala-Arg-Arg-pNA, but not against Z-Phe-Arg-pNA. The identity of rEhCP5 as a cysteine proteinase was confirmed by inhibition with specific cysteine proteinase inhibitors. In contrast, various compounds known to specifically inhibit aspartic, metallo, or serine proteinases had no effect on rEhCP5 activity.

L6 ANSWER 2 OF 4 CAPLUS
ACCESSION NUMBER: 2001:360174 CAPLUS
DOCUMENT NUMBER: 134:365701
TITLE: Recombinant gelatins derived from type I collagen .alpha.1 chain, and pharmaceutical applications in vaccines thereof
INVENTOR(S): Chang, Robert C.; Kivirikko, Kari I.; Neff, Thomas B.; Olsen, David R.; Polarek, James W.
PATENT ASSIGNEE(S): Fibrogen, Inc., USA
SOURCE: PCT Int. Appl., 130 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001034801	A2	20010517	WO 2000-US30843	20001110
WO 2001034801	A3	20020131		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1232262	A2	20020821	EP 2000-978469	20001110
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				

PRIORITY APPLN. INFO.:
US 1999-165114P P 19991112
US 2000-204437P P 20000515
WO 2000-US30843 W 20001110

AB The present invention relates to vaccines comprising recombinant gelatin, to methods of producing and using such vaccines, and to vaccination kits. The present invention relates to recombinant gelatins and compns. thereof, and methods of producing and using the same. ***Human*** ***gelatins*** with discrete fragments of the .alpha.1(I) chain of human type I collagen is produced using a yeast multi-gene recombinant expression system. Specific fragments of cDNA for .alpha.1(I) chain from human type I collagen is cloned for the expression in Pichia pastoris which is also transformed with genes for the .alpha. or .beta. subunit of human prolyl 4-hydroxylase, which is used to improve the stability of the recombinant gelatins. Well-defined, highly homogenous gelatin fragments ranging in size from 6-65 ***kDa*** are produced, which can support

cell attachment activity, have lower level endotoxin contamination, and are proteolytically more stable. The peptide profile of thermal, acid, and enzymic hydrolysis anal., and antigenicity of these recombinant gelatins are studied. This presents unsurpassed flexibility in terms of the size and biophys. properties of the gelatin that can be used for pharmaceutical or industrial applications.

L6 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:360037 CAPLUS
DOCUMENT NUMBER: 134:362228
TITLE: Recombinant gelatins derived from type I collagen .alpha.1 chain, and pharmaceutical and industrial applications thereof
INVENTOR(S): Chang, Robert C.; Kivirikko, Kari I.; Neff, Thomas B.; Olsen, David R.; Polarek, James W.
PATENT ASSIGNEE(S): Fibrogen, Inc., USA
SOURCE: PCT Int. Appl., 137 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001034646	A2	20010517	WO 2000-US30791	20001110
WO 2001034646	A3	20011206		
WO 2001034646	C2	20021121		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

EP 1232181	A2	20020821	EP 2000-978455	20001110

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

PRIORITY APPLN. INFO.:
US 1999-165114P P 19991112
US 2000-204437P P 20000515
WO 2000-US30791 W 20001110

AB The present invention relates to recombinant gelatins and compns. thereof, and methods of producing and using the same. ***Human*** ***gelatins*** with discrete fragments of the .alpha.1(I) chain of human type I collagen is produced using a yeast multi-gene recombinant expression system. Specific fragments of cDNA for .alpha.1(I) chain from human type I collagen is cloned for the expression in Pichia pastoris which is also transformed with genes for the .alpha. or .beta. subunit of human prolyl 4-hydroxylase, which is used to improve the stability of the recombinant gelatins. Well-defined, highly homogenous gelatin fragments ranging in size from 6-65 ***kDa*** are produced, which can support cell attachment activity, have lower level endotoxin contamination, and are proteolytically more stable. The peptide profile of thermal, acid, and enzymic hydrolysis anal., and antigenicity of these recombinant gelatins are studied. This presents unsurpassed flexibility in terms of the size and biophys. properties of the gelatin that can be used for pharmaceutical or industrial applications.

L6 ANSWER 4 OF 4 MEDLINE DUPLICATE 2
ACCESSION NUMBER: 1999081753 MEDLINE
DOCUMENT NUMBER: 99081753 PubMed ID: 9864226
TITLE: An extracellular protease of Streptococcus gordonii hydrolyzes type IV collagen and collagen analogues.
AUTHOR: Juarez Z E; Stinson M W
CORPORATE SOURCE: Center for Microbial Pathogenesis, School of Medicine and Biomedical Sciences, State University of New York at Buffalo 14214, USA.
CONTRACT NUMBER: RO1 DE05696 (NIDCR)
SOURCE: INFECTION AND IMMUNITY, (1999 Jan) 67 (1) 271-8.
Journal code: 0246127. ISSN: 0019-9567.

PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Artic (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199901
ENTRY DATE: Entered STN: 19990209
Last Updated on STN: 20000303
Entered Medline: 19990128

AB Streptococcus gordonii is a frequent cause of infective bacterial endocarditis, but its mechanisms of virulence are not well defined. In this study, streptococcal proteases were recovered from spent chemically defined medium (CDM) and fractionated by ammonium sulfate precipitation and by ion-exchange and gel filtration column chromatography. Three proteases were distinguished by their different solubilities in ammonium sulfate and their specificities for synthetic peptides. One of the enzymes cleaved collagen analogs Gly-Pro 4-methoxy-beta-naphthylamide, 2-furanacryloyl-Leu-Gly-Pro-Ala (FALGPA), and p-phenylazobenzyloxycarbonyl-Pro-Leu-Gly-Pro-Arg (pZ-peptide) and was released from the streptococci while complexed to peptidoglycan fragments. Treatment of this protease with mutanolysin reduced its 180- to 200- ***kDa*** mass to 98 ***kDa*** without loss of enzymatic activity. The purified protease cleaved bovine ***gelatin*** , ***human*** placental type IV collagen, and the Aalpha chain of fibrinogen but not albumin, fibronectin, laminin, or myosin. Enzyme activity was inhibited by phenylmethylsulfonyl fluoride, indicating that it is a serine-type protease. Maximum production of the 98- ***kDa*** protease occurred during growth of S. gordonii CH1 in CDM containing 0.075% total amino acids at pH 7.0 with minimal aeration. Higher initial concentrations of amino acids prevented the release of the protease without reducing cell-associated enzyme levels, and the addition of an amino acid mixture to an actively secreting culture stopped further enzyme release. The purified protease was stored frozen at -20 degreesC for several months or heated at 50 degreesC for 10 min without loss of activity. These data indicate that S. gordonii produces an extracellular gelatinase/type IV collagenase during growth in medium containing minimal concentrations of free amino acids. Thus, the extracellular enzyme is a potential virulence factor in the amino acid-stringent, thrombotic, valvular lesions of bacterial endocarditis.

```
=> d his

     (FILE 'HOME' ENTERED AT 12:57:53 ON 19 MAR 2003)

     FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT
     12:58:13 ON 19 MAR 2003
L1            70 S HUMAN GELATIN
L2           102 S HUMAN (A) GELATIN
L3           102 S L1 OR L2
L4        124357 S KDA (P) 3
L5            11 S L3 (P) KDA
L6             4 DUPLICATE REMOVE L5 (7 DUPLICATES REMOVED)

=> s bloom strength
L7            59 BLOOM STRENGTH

=> s l3 (p) l7
L8             0 L3 (P) L7

=> s gelatin
L9        108768 GELATIN

=> s l9 (p) hydroxylat?
L10           70 L9 (P) HYDROXYLAT?

=> s l10 (p) percent?
L11            0 L10 (P) PERCENT?

=> s l3 (p) non-hydroxylat?
L12            0 L3 (P) NON-HYDROXYLAT?

=> s gelatin polypeptide
L13           53 GELATIN POLYPEPTIDE
```

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=> s l13 (p) (mixture or homogeneo
L14           0 L13 (P) (MIXTURE OR HOMOGENEOUS)

=> d his

     (FILE 'HOME' ENTERED AT 12:57:53 ON 19 MAR 2003)

     FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT
     12:58:13 ON 19 MAR 2003
L1            70 S HUMAN GELATIN
L2           102 S HUMAN (A) GELATIN
L3           102 S L1 OR L2
L4        124357 S KDA (P) 3
L5            11 S L3 (P) KDA
L6             4 DUPLICATE REMOVE L5 (7 DUPLICATES REMOVED)
L7            59 S BLOOM STRENGTH
L8             0 S L3 (P) L7
L9        108768 S GELATIN
L10           70 S L9 (P) HYDROXYLAT?
L11            0 S L10 (P) PERCENT?
L12            0 S L3 (P) NON-HYDROXYLAT?
L13           53 S GELATIN POLYPEPTIDE
L14            0 S L13 (P) (MIXTURE OR HOMOGENEOUS)

=> s l3 (p) (heterogeneous or mixture)
L15            7 L3 (P) (HETEROGENEOUS OR MIXTURE)

=> duplicate remove l15
DUPLICATE PREFERENCE IS 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH'
KEEP DUPLICATES FROM MORE THAN ONE FILE?  Y/(N):n
PROCESSING COMPLETED FOR L15
L16            3 DUPLICATE REMOVE L15 (4 DUPLICATES REMOVED)

=> d l16 1-3 ibib abs

L16  ANSWER 1 OF 3     MEDLINE                              DUPLICATE 1
ACCESSION NUMBER:   1999081753     MEDLINE
DOCUMENT NUMBER:    99081753   PubMed ID: 9864226
TITLE:              An extracellular protease of Streptococcus gordonii
                    hydrolyzes type IV collagen and collagen analogues.
AUTHOR:             Juarez Z E; Stinson M W
CORPORATE SOURCE:   Center for Microbial Pathogenesis, School of Medicine and
                    Biomedical Sciences, State University of New York at
                    Buffalo 14214, USA.
CONTRACT NUMBER:    RO1 DE05696 (NIDCR)
SOURCE:             INFECTION AND IMMUNITY, (1999 Jan) 67 (1) 271-8.
                    Journal code: 0246127. ISSN: 0019-9567.
PUB. COUNTRY:       United States
DOCUMENT TYPE:      Journal; Article; (JOURNAL ARTICLE)
LANGUAGE:           English
FILE SEGMENT:       Priority Journals
ENTRY MONTH:        199901
ENTRY DATE:         Entered STN: 19990209
                    Last Updated on STN: 20000303
                    Entered Medline: 19990128
AB   Streptococcus gordonii is a frequent cause of infective bacterial
     endocarditis, but its mechanisms of virulence are not well defined. In
     this study, streptococcal proteases were recovered from spent chemically
     defined medium (CDM) and fractionated by ammonium sulfate precipitation
     and by ion-exchange and gel filtration column chromatography. Three
     proteases were distinguished by their different solubilities in ammonium
     sulfate and their specificities for synthetic peptides. One of the enzymes
     cleaved collagen analogs Gly-Pro 4-methoxy-beta-naphthylamide,
     2-furanacryloyl-Leu-Gly-Pro-Ala (FALGPA), and p-phenylazobenzyloxycarbonyl-
     Pro-Leu-Gly-Pro-Arg (pZ-peptide) and was released from the streptococci
     while complexed to peptidoglycan fragments. Treatment of this protease
     with mutanolysin reduced its 180- to 200-kDa mass to 98 kDa without loss
     of enzymatic activity. The purified protease cleaved bovine
       ***gelatin***   ,   ***human***   placental type IV collagen, and the
     Aalpha chain of fibrinogen but not albumin, fibronectin, laminin, or
     myosin. Enzyme activity was inhibited by phenylmethylsulfonyl fluoride,
```

indicating that it is a serin[redacted]ype protease. Maximum producti[redacted] of the 98-kDa protease occurred duri[redacted] growth of S. gordonii CH1 in [redacted] containing 0.075% total amino acids at pH 7.0 with minimal aeration. Higher initial concentrations of amino acids prevented the release of the protease without reducing cell-associated enzyme levels, and the addition of an amino acid ***mixture*** to an actively secreting culture stopped further enzyme release. The purified protease was stored frozen at -20 degreesC for several months or heated at 50 degreesC for 10 min without loss of activity. These data indicate that S. gordonii produces an extracellular gelatinase/type IV collagenase during growth in medium containing minimal concentrations of free amino acids. Thus, the extracellular enzyme is a potential virulence factor in the amino acid-stringent, thrombotic, valvular lesions of bacterial endocarditis.

L16 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1990:446160 CAPLUS
DOCUMENT NUMBER: 113:46160
TITLE: Specific properties of microcapsules with walls formed from proteins and crosslinked polysaccharides
AUTHOR(S): Levy, Marie Christine; Andry, Marie Christine
CORPORATE SOURCE: Lab. Pharmacotech., Fac. Pharm., Reims, 51096, Fr.
SOURCE: S.T.P. Pharma (1989), 5(1), 26-30
CODEN: STPPEF; ISSN: 0758-6922
DOCUMENT TYPE: Journal
LANGUAGE: French
AB Microcapsules (with mixed walls) were prepd. through an interfacial crosslinking process applied to ***mixts*** . of a protein (***gelatin*** , ***human*** serum albumin) and a polysaccharide. Their properties were compared with those of microcapsules made of crosslinked protein only. The crosslinking agent was terephthaloyl chloride. The microcapsules with mixed walls appeared to be more resistant to lysis in digestive media. This effect increased increasing polysaccharide amt. It also depended on the nature of the polysaccharide, bearing carboxylic groups and on the crosslinking pH. Crosslinking of acidic polysaccharides admixed with gelatin, resulted in the formation of hydrophilic microcapsules.

L16 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1972:42970 CAPLUS
DOCUMENT NUMBER: 76:42970
TITLE: Wetting by water of gels containing gelatin and globular proteins
AUTHOR(S): Braudo, E. E.; Tolstoguzov, V. B.; Ershova, V. A.; Slonimskii, G. L.
CORPORATE SOURCE: Inst. Elementoorg. Soedin., Moscow, USSR
SOURCE: Kolloidnyi Zhurnal (1971), 33(5), 653-6
CODEN: KOZHAG; ISSN: 0023-2912
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB The hydrophilic properties were studied of surfaces of gels formed by ***mixts*** . of ***gelatin*** , ***human*** plasma albumin, casein, and egg albumin. The effect of the addn. of globular proteins to gelatin gels depended on several factors, the most important of which were the surface activity of the proteins and their surface denaturation capacity.

=> d his

(FILE 'HOME' ENTERED AT 12:57:53 ON 19 MAR 2003)

FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT 12:58:13 ON 19 MAR 2003

L1	70	S HUMAN GELATIN
L2	102	S HUMAN (A) GELATIN
L3	102	S L1 OR L2
L4	124357	S KDA (P) 3
L5	11	S L3 (P) KDA
L6	4	DUPLICATE REMOVE L5 (7 DUPLICATES REMOVED)
L7	59	S BLOOM STRENGTH
L8	0	S L3 (P) L7
L9	108768	S GELATIN

```
L10           70 S L9 (P) HYDROXYLA
L11            0 S L10 (P) PERCENT?
L12            0 S L3 (P) NON-HYDROXYLAT?
L13           53 S GELATIN POLYPEPTIDE
L14            0 S L13 (P) (MIXTURE OR HOMOGENEOUS)
L15            7 S L3 (P) (HETEROGENEOUS OR MIXTURE)
L16            3 DUPLICATE REMOVE L15 (4 DUPLICATES REMOVED)

=> s l3 (p) collagen
L17           16 L3 (P) COLLAGEN

=> duplicate remove l17
DUPLICATE PREFERENCE IS 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH'
KEEP DUPLICATES FROM MORE THAN ONE FILE?  Y/(N):n
PROCESSING COMPLETED FOR L17
L18            8 DUPLICATE REMOVE L17 (8 DUPLICATES REMOVED)

=> s l18 not l16 or l6
L19            8 L18 NOT L16 OR L6

=> d l19 1-8 ibib abs

L19  ANSWER 1 OF 8     MEDLINE
ACCESSION NUMBER:    2002113136     MEDLINE
DOCUMENT NUMBER:     21671926   PubMed ID: 11812234
TITLE:               Recombinant expression and purification of an enzymatically
                     active cysteine proteinase of the protozoan parasite
                     Entamoeba histolytica.
AUTHOR:              Hellberg A; Nowak N; Leippe M; Tannich E; Bruchhaus I
CORPORATE SOURCE:    Bernhard Nocht Institute for Tropical Medicine, Bernhard
                     Nocht Strasse 74, 20359 Hamburg, Germany.
SOURCE:              PROTEIN EXPRESSION AND PURIFICATION, (2002 Feb) 24 (1)
                     131-7.
                     Journal code: 9101496. ISSN: 1046-5928.
PUB. COUNTRY:        United States
DOCUMENT TYPE:       Journal; Article; (JOURNAL ARTICLE)
LANGUAGE:            English
FILE SEGMENT:        Priority Journals
ENTRY MONTH:         200210
ENTRY DATE:          Entered STN: 20020216
                     Last Updated on STN: 20021004
                     Entered Medline: 20021003
AB   Cysteine proteinases and in particular cysteine proteinase 5 (EhCP5) of
     Entamoeba histolytica are considered important for ameba pathogenicity. To
     study EhCP5 in more detail a protocol was elaborated to produce
     considerable amounts of the enzyme in its active form. The protein was
     expressed in Escherichia coli as a histidine-tagged pro-enzyme and
     purified to homogeneity under denaturing conditions in the presence of
     guanidine-HCl using nickel affinity chromatography. Renaturation was
     performed by 100-fold dilution in a buffer containing reduced and oxidized
     thiols, which led to soluble but enzymatically inactive pro-enzyme.
     Further processing and activation was achieved in the presence of 10 mM
     DTT and 0.04% SDS at 37 degrees C. Recombinant enzyme (rEhCP5) was
     indistinguishable from native EhCP5 purified from E. histolytica lysates.
     Both runs in SDS-PAGE under reducing and nonreducing conditions at
     positions corresponding to 27 and 29   ***kDa***   , respectively, had the
     same pH optima and displayed similar specific activity against azocasein.
     Moreover, both enzymes were active against a broad spectrum of biological
     and synthetic substrates such as mucin, fibrinogen,   ***collagen***   ,
     human hemoglobin, bovine serum albumin,   ***gelatin***   ,   ***human***
     IgG, Z-Arg-Arg-pNA, and Z-Ala-Arg-Arg-pNA, but not against Z-Phe-Arg-pNA.
     The identity of rEhCP5 as a cysteine proteinase was confirmed by
     inhibition with specific cysteine proteinase inhibitors. In contrast,
     various compounds known to specifically inhibit aspartic, metallo, or
     serine proteinases had no effect on rEhCP5 activity.
     Copyright 2002 Elsevier Science (USA).

L19  ANSWER 2 OF 8     MEDLINE
ACCESSION NUMBER:    1999081753     MEDLINE
DOCUMENT NUMBER:     99081753   PubMed ID: 9864226
TITLE:               An extracellular protease of Streptococcus gordonii
                     hydrolyzes type IV collagen and collagen analogues.
```

AUTHOR: Juarez Z E; St[redacted]on M W
CORPORATE SOURCE: Center for Mic[redacted]bial Pathogenesis, School of Me[redacted]cine and Biomedical Sciences, State University of New York at Buffalo 14214, USA.
CONTRACT NUMBER: RO1 DE05696 (NIDCR)
SOURCE: INFECTION AND IMMUNITY, (1999 Jan) 67 (1) 271-8.
Journal code: 0246127. ISSN: 0019-9567.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199901
ENTRY DATE: Entered STN: 19990209
Last Updated on STN: 20000303
Entered Medline: 19990128

AB Streptococcus gordonii is a frequent cause of infective bacterial endocarditis, but its mechanisms of virulence are not well defined. In this study, streptococcal proteases were recovered from spent chemically defined medium (CDM) and fractionated by ammonium sulfate precipitation and by ion-exchange and gel filtration column chromatography. Three proteases were distinguished by their different solubilities in ammonium sulfate and their specificities for synthetic peptides. One of the enzymes cleaved collagen analogs Gly-Pro 4-methoxy-beta-naphthylamide, 2-furanacryloyl-Leu-Gly-Pro-Ala (FALGPA), and p-phenylazobenzyloxycarbonyl-Pro-Leu-Gly-Pro-Arg (pZ-peptide) and was released from the streptococci while complexed to peptidoglycan fragments. Treatment of this protease with mutanolysin reduced its 180- to 200- ***kDa*** mass to 98 ***kDa*** without loss of enzymatic activity. The purified protease cleaved bovine ***gelatin*** , ***human*** placental type IV collagen, and the Aalpha chain of fibrinogen but not albumin, fibronectin, laminin, or myosin. Enzyme activity was inhibited by phenylmethylsulfonyl fluoride, indicating that it is a serine-type protease. Maximum production of the 98- ***kDa*** protease occurred during growth of S. gordonii CH1 in CDM containing 0.075% total amino acids at pH 7.0 with minimal aeration. Higher initial concentrations of amino acids prevented the release of the protease without reducing cell-associated enzyme levels, and the addition of an amino acid mixture to an actively secreting culture stopped further enzyme release. The purified protease was stored frozen at -20 degreesC for several months or heated at 50 degreesC for 10 min without loss of activity. These data indicate that S. gordonii produces an extracellular gelatinase/type IV collagenase during growth in medium containing minimal concentrations of free amino acids. Thus, the extracellular enzyme is a potential virulence factor in the amino acid-stringent, thrombotic, valvular lesions of bacterial endocarditis.

L19 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:360174 CAPLUS
DOCUMENT NUMBER: 134:365701
TITLE: Recombinant gelatins derived from type I collagen .alpha.1 chain, and pharmaceutical applications in vaccines thereof
INVENTOR(S): Chang, Robert C.; Kivirikko, Kari I.; Neff, Thomas B.; Olsen, David R.; Polarek, James W.
PATENT ASSIGNEE(S): Fibrogen, Inc., USA
SOURCE: PCT Int. Appl., 130 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001034801	A2	20010517	WO 2000-US30843	20001110
WO 2001034801	A3	20020131		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,

DE, DK, ES, FI, FR, G[redacted]GR, IE, IT, LU, MC, NL, PT, SE[redacted]TR, BF,
BJ, CF, CG, CI, CM, G[redacted]GN, GW, ML, MR, NE, SN, TD, T[redacted]
EP 1232262 A2 20020821 EP 2000-978469 20001110
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
PRIORITY APPLN. INFO.: US 1999-165114P P 19991112
US 2000-204437P P 20000515
WO 2000-US30843 W 20001110

AB The present invention relates to vaccines comprising recombinant gelatin, to methods of producing and using such vaccines, and to vaccination kits. The present invention relates to recombinant gelatins and compns. thereof, and methods of producing and using the same. ***Human*** ***gelatins*** with discrete fragments of the .alpha.1(I) chain of human type I ***collagen*** is produced using a yeast multi-gene recombinant expression system. Specific fragments of cDNA for .alpha.1(I) chain from human type I ***collagen*** is cloned for the expression in Pichia pastoris which is also transformed with genes for the .alpha. or .beta. subunit of human prolyl 4-hydroxylase, which is used to improve the stability of the recombinant gelatins. Well-defined, highly homogenous gelatin fragments ranging in size from 6-65 ***kDa*** are produced, which can support cell attachment activity, have lower level endotoxin contamination, and are proteolytically more stable. The peptide profile of thermal, acid, and enzymic hydrolysis anal., and antigenicity of these recombinant gelatins are studied. This presents unsurpassed flexibility in terms of the size and biophys. properties of the gelatin that can be used for pharmaceutical or industrial applications.

L19 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:360037 CAPLUS
DOCUMENT NUMBER: 134:362228
TITLE: Recombinant gelatins derived from type I collagen .alpha.1 chain, and pharmaceutical and industrial applications thereof
INVENTOR(S): Chang, Robert C.; Kivirikko, Kari I.; Neff, Thomas B.; Olsen, David R.; Polarek, James W.
PATENT ASSIGNEE(S): Fibrogen, Inc., USA
SOURCE: PCT Int. Appl., 137 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001034646	A2	20010517	WO 2000-US30791	20001110
WO 2001034646	A3	20011206		
WO 2001034646	C2	20021121		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

EP 1232181 A2 20020821 EP 2000-978455 20001110
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
PRIORITY APPLN. INFO.: US 1999-165114P P 19991112
US 2000-204437P P 20000515
WO 2000-US30791 W 20001110

AB The present invention relates to recombinant gelatins and compns. thereof, and methods of producing and using the same. ***Human*** ***gelatins*** with discrete fragments of the .alpha.1(I) chain of human type I ***collagen*** is produced using a yeast multi-gene recombinant expression system. Specific fragments of cDNA for .alpha.1(I) chain from human type I ***collagen*** is cloned for the expression in Pichia pastoris which is also transformed with genes for the .alpha. or .beta. subunit of human prolyl 4-hydroxylase, which is used to improve the stability of the recombinant gelatins. Well-defined, highly homogenous

gelatin fragments ranging in [redacted]e from 6-65 ***kDa*** are [redacted]oduced, which can support cell attach[redacted]t activity, have lower level e[redacted]toxin contamination, and are proteolytically more stable. The peptide profile of thermal, acid, and enzymic hydrolysis anal., and antigenicity of these recombinant gelatins are studied. This presents unsurpassed flexibility in terms of the size and biophys. properties of the gelatin that can be used for pharmaceutical or industrial applications.

L19 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1985:592802 CAPLUS
DOCUMENT NUMBER: 103:192802
TITLE: Characterization of protease production by a type-III group-B streptococcus
AUTHOR(S): Straus, David C.; Brown, Jacqueline G.
CORPORATE SOURCE: Health Sci. Cent., Texas Tech Univ., Lubbock, TX, USA
SOURCE: Current Microbiology (1985), 12(3), 127-34
CODEN: CUMIDD; ISSN: 0343-8651
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A type-III group-B streptococcus (S. agalactiae) isolated from a case of late-onset sepsis was examd. for protease prodn. In broth culture, extracellular proteolytic enzymes were not detected until the late exponential phase of growth with max. protease prodn. occurring during the stationary phase. Three distinct protease pools were isolated from the supernatant fluids of stationary-phase cultures, employing a combination of ion exchange chromatog. and gel filtration chromatog. One population of proteases (contg. 2 protease pools separable by gel filtration chromatog.) eluted from a DEAE-cellulose column at a NaCl gradient concn. of 0.15M while a second population eluted from the same material at a NaCl concn. of 0.35M. These protease pools varied in mol. wts. from .apprx.25,000 daltons to 160,000 daltons as detd. by gel filtration on Sephadex G-200. All 3 protease prepns. had pH optima of 8.0-9.0, and all were active against ***gelatin*** , ***human*** serum albumin, and casein, but were not active against elastin or ***collagen*** . In addn., all 3 protease prepns., completely inactivated purified type-III group-B streptococcal neuraminidase. The role of these proteases in the disease process caused by the type-III group-B streptococci must remain speculative at this time.

L19 ANSWER 6 OF 8 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1990:327648 BIOSIS
DOCUMENT NUMBER: BA90:35667
TITLE: REGULATION OF PLASMINOGEN ACTIVATION BY COMPONENTS OF THE EXTRACELLULAR MATRIX.
AUTHOR(S): STACK S; GONZALEZ-GRONOW M; PIZZO S V
CORPORATE SOURCE: DEP. PATHOL., BOX 3712, DUKE UNIV. MED. CENT., DURHAM, N.C. 27710.
SOURCE: BIOCHEMISTRY, (1990) 29 (20), 4966-4970.
CODEN: BICHAW. ISSN: 0006-2960.
FILE SEGMENT: BA; OLD
LANGUAGE: English
AB The kinetics of activation of Glu-plasminogen (Glu-Pg) and Lys77-Pg by two-chain recombinant tissue plasminogen activator (t-PA) were determined in the presence of isolated protein components of the extracellular matrix (ECM) and compared to activation in the presence of fibrinogen and fibrinogen fragments and in the absence of added protein. Several ECM protein components were as effective as fibrinogen fragments at stimulating Pg activation. Stimulation of Glu-Pg activation resulted from both a decrease in Km and an increase in Vmax, whereas stimulation of Lys77-Pg was due primarily to increases in Vmax. The most effective stimulators of activation were basement membrane type IV collagen and gelatin which resulted in a 21- and 55-fold increase, respectively, in the kcat/Km of Glu-Pg (relative to a 10-fold increase observed with fibrinogen fragments). Amidolytic activity of t-Pa was also enhanced up to 12-fold by ECM proteins. However, plasmin amidolytic activity was unaffected by the presence of added proteins. These data suggest that several ECM-associated proteins can enhanced the activation of Pg in the absence of fibrin.

L19 ANSWER 7 OF 8 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1985:385679 BIOSIS
DOCUMENT NUMBER: BA80:55671
TITLE: THE IMMUNOREACTIVITY LIGAND AND CELL BINDING

CHARACTERISTICS OF RHEUMATOID SYNOVIAL FLUID FIBRONECTIN.
AUTHOR(S): CARSONS S; LAVIES B B; DIAMOND H S; KINNEY S
CORPORATE SOURCE: DIV. CLIN. IMMUNOLOGY, LONG ISLAND JEWISH-HILLSIDE MED. CENTER, NEW HYDE PARK, NY 11042.
SOURCE: ARTHRITIS RHEUM, (1985) 28 (6), 601-612.
CODEN: ARHEAW. ISSN: 0004-3591.
FILE SEGMENT: BA; OLD
LANGUAGE: English

AB Fibronectin promotes macrophage adherence and expression of Fc receptors, is chemotactic for fibroblasts, and is an opsonin for fibrin and denatured collagen. These properties suggest a role for fibronectin in the modulation of joint inflammation. Since structural modification of the fibronectin molecule results in the loss or de novo acquisition of opsonic and chemotactic activity, the functional and immunochemical properties of fibronectin isolated from the inflamed joint was determined. The synovial fluids obtained from patients with active rheumatoid arthritis (RA) 86% contained fibronectin fragments and 39% of the fluids no longer displayed the dimeric form. Compared with native fibronectin, RA peptides were as active in promoting synoviocyte chemotaxis and in glycosaminoglycan binding, but displayed lower affinity for fibrin and gelatin. Although comparable with intact protein in augmenting monocyte attachment to gelatin, the RA synovial fluid peptides did not augment monocyte attachment to fibrin. Analysis of whole synovial fluid and isolated fibronectins by enzyme immunoassay showed that the increased fibronectin immunoreactivity, previously reported in RA synovial fluid, measures intact and nearly intact protein and does not measure extensively degraded fragments.

L19 ANSWER 8 OF 8 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 1980:157195 BIOSIS
DOCUMENT NUMBER: BA69:32191
TITLE: THE CLINICAL MEASUREMENT OF URINARY TOTAL HYDROXY PROLINE EXCRETION.
AUTHOR(S): GASSER A; CELADA A; COURVOISIER B; DEPIERRE D; HULME P M; RINSLER M; WILLIAMS D; WOOTTON R
CORPORATE SOURCE: CENT. MAL. OSTEO-ARTICULAIRES, DEP. MED., CANTONAL HOSP., 1211 GENEVA 4, SWITZ.
SOURCE: CLIN CHIM ACTA, (1979) 95 (3), 487-492.
CODEN: CCATAR. ISSN: 0009-8981.
FILE SEGMENT: BA; OLD
LANGUAGE: English

AB The effect of dietary control on the daily variation in total hydroxyproline excretion was examined in 2 studies. In the first, a normal volunteer ate a controlled diet containing varying gelatin supplements for several weeks. In the second, the effect of removing hydroxyproline-containing foods from the diets of 8 volunteers was examined. Daily variation in total hydroxyproline excretion apparently falls when the gelatin content of the diet is decreased, whether the results are expressed as the total hydroxyproline excretion rate or as the total hydroxyproline:creatine ratio. Since this fall in variation takes place within 24 h of dietary control beginning, longer periods of dietary restriction are unnecessary to achieve optimum precision in the measurement of total hydroxyproline. Sometimes results are better expressed as the ratio hydroxyproline:creatine than as the total hydroxyproline excretion rate. [This excretion rate can be used as an index of bone turnover since most urinary hydroxyproline originates from bone, mainly from the degradation of newly synthesized collagen. This method can be used to detect some bone diseases].

=> d his

(FILE 'HOME' ENTERED AT 12:57:53 ON 19 MAR 2003)

FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT 12:58:13 ON 19 MAR 2003

```
L1          70 S HUMAN GELATIN
L2         102 S HUMAN (A) GELATIN
L3         102 S L1 OR L2
L4      124357 S KDA (P) 3
L5          11 S L3 (P) KDA
L6           4 DUPLICATE REMOVE L5 (7 DUPLICATES REMOVED)
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L7          59 S BLOOM STRENGTH
L8           0 S L3 (P) L7
L9      108768 S GELATIN
L10          70 S L9 (P) HYDROXYLAT?
L11           0 S L10 (P) PERCENT?
L12           0 S L3 (P) NON-HYDROXYLAT?
L13          53 S GELATIN POLYPEPTIDE
L14           0 S L13 (P) (MIXTURE OR HOMOGENEOUS)
L15           7 S L3 (P) (HETEROGENEOUS OR MIXTURE)
L16           3 DUPLICATE REMOVE L15 (4 DUPLICATES REMOVED)
L17          16 S L3 (P) COLLAGEN
L18           8 DUPLICATE REMOVE L17 (8 DUPLICATES REMOVED)
L19           8 S L18 NOT L16 OR L6

=> s l3 (p) composition
L20           5 L3 (P) COMPOSITION

=> duplicate remove l20
PROCESSING COMPLETED FOR L20
L21           4 DUPLICATE REMOVE L20 (1 DUPLICATE REMOVED)

=> d l21 1-4 ibib abs

L21  ANSWER 1 OF 4  CAPLUS  COPYRIGHT 2003 ACS
ACCESSION NUMBER:         2001:360174  CAPLUS
DOCUMENT NUMBER:          134:365701
TITLE:                    Recombinant gelatins derived from type I collagen
                          .alpha.1 chain, and pharmaceutical applications in
                          vaccines thereof
INVENTOR(S):              Chang, Robert C.; Kivirikko, Kari I.; Neff, Thomas B.;
                          Olsen, David R.; Polarek, James W.
PATENT ASSIGNEE(S):       Fibrogen, Inc., USA
SOURCE:                   PCT Int. Appl., 130 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   2
PATENT INFORMATION:

     PATENT NO.        KIND  DATE           APPLICATION NO.  DATE
     ---------------   ----  --------       ---------------  --------
     WO 2001034801      A2   20010517       WO 2000-US30843  20001110
     WO 2001034801      A3   20020131
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,
             HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
             LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
             SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
             YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     EP 1232262         A2   20020821       EP 2000-978469   20001110
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
PRIORITY APPLN. INFO.:                  US 1999-165114P  P  19991112
                                        US 2000-204437P  P  20000515
                                        WO 2000-US30843  W  20001110
AB   The present invention relates to vaccines comprising recombinant gelatin,
     to methods of producing and using such vaccines, and to vaccination kits.
     The present invention relates to recombinant gelatins and   ***compns***
     . thereof, and methods of producing and using the same.    ***Human***
       ***gelatins***  with discrete fragments of the .alpha.1(I) chain of human
     type I collagen is produced using a yeast multi-gene recombinant
     expression system.  Specific fragments of cDNA for .alpha.1(I) chain from
     human type I collagen is cloned for the expression in Pichia pastoris
     which is also transformed with genes for the .alpha. or .beta. subunit of
     human prolyl 4-hydroxylase, which is used to improve the stability of the
     recombinant gelatins.  Well-defined, highly homogenous gelatin fragments
     ranging in size from 6-65 kDa are produced, which can support cell
     attachment activity, have lower level endotoxin contamination, and are
     proteolytically more stable.  The peptide profile of thermal, acid, and
```

enzymic hydrolysis anal., and antigenicity of these recombinant gelatins are studied. This presents unsurpassed flexibility in terms of the size and biophys. properties of the gelatin that can be used for pharmaceutical or industrial applications.

L21 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:360037 CAPLUS
DOCUMENT NUMBER: 134:362228
TITLE: Recombinant gelatins derived from type I collagen .alpha.1 chain, and pharmaceutical and industrial applications thereof
INVENTOR(S): Chang, Robert C.; Kivirikko, Kari I.; Neff, Thomas B.; Olsen, David R.; Polarek, James W.
PATENT ASSIGNEE(S): Fibrogen, Inc., USA
SOURCE: PCT Int. Appl., 137 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001034646	A2	20010517	WO 2000-US30791	20001110
WO 2001034646	A3	20011206		
WO 2001034646	C2	20021121		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1232181	A2	20020821	EP 2000-978455	20001110
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				

PRIORITY APPLN. INFO.: US 1999-165114P P 19991112
US 2000-204437P P 20000515
WO 2000-US30791 W 20001110

AB The present invention relates to recombinant gelatins and ***compns*** . thereof, and methods of producing and using the same. ***Human*** ***gelatins*** with discrete fragments of the .alpha.1(I) chain of human type I collagen is produced using a yeast multi-gene recombinant expression system. Specific fragments of cDNA for .alpha.1(I) chain from human type I collagen is cloned for the expression in Pichia pastoris which is also transformed with genes for the .alpha. or .beta. subunit of human prolyl 4-hydroxylase, which is used to improve the stability of the recombinant gelatins. Well-defined, highly homogenous gelatin fragments ranging in size from 6-65 kDa are produced, which can support cell attachment activity, have lower level endotoxin contamination, and are proteolytically more stable. The peptide profile of thermal, acid, and enzymic hydrolysis anal., and antigenicity of these recombinant gelatins are studied. This presents unsurpassed flexibility in terms of the size and biophys. properties of the gelatin that can be used for pharmaceutical or industrial applications.

L21 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1987:513072 CAPLUS
DOCUMENT NUMBER: 107:113072
TITLE: Gelatin-binding fragments of fibronectin as possible inhibitors of connective tissue cell proliferation
AUTHOR(S): Abakumova, O. Yu.; Kutsenko, N. G.; Mitina, V. Kh.; Panasyuk, A. F.; Orekhovich, V. N.
CORPORATE SOURCE: Inst. Biol. Med. Khim., Moscow, USSR
SOURCE: Doklady Akademii Nauk SSSR (1987), 294(4), 984-8 [Biochem.]
CODEN: DANKAS; ISSN: 0002-3264
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB A DNA synthesis inhibitor was detected in cultured human skin fibroblasts.

This inhibitor was found to b[redacted] fragment of fibronectin, whic[redacted]was released by proteolytic cleav[redacted]e of fibronectin. The inhibito[redacted]had high affinity for gelatin. The isolation, characterization, and possible functions of the inhibitor are considered.

L21 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2003 ACS DUPLICATE 1
ACCESSION NUMBER: 1985:483773 CAPLUS
DOCUMENT NUMBER: 103:83773
TITLE: Unusual low affinity of human liver fibronectin for gelatin
AUTHOR(S): Isemura, Mamoru; Munakata, Hiroshi; Kosakai, Masashi; Yamaguchi, Yu; Aikawa, Junichiro; Yosizawa, Zensaku
CORPORATE SOURCE: Sch. Med., Tohoku Univ., Sendai, 980, Japan
SOURCE: Tohoku Journal of Experimental Medicine (1985), 145(4), 477-8
CODEN: TJEMAO; ISSN: 0040-8727
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Fibronectin extd. from human liver was shown to have very low affinity for gelatin, unlike plasma fibronectin. This unusual property of liver fibronectin is not due to proteolytic fragmentation.

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=> s endotoxin
L22     127071 ENDOTOXIN

=> d his

     (FILE 'HOME' ENTERED AT 12:57:53 ON 19 MAR 2003)

     FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT
     12:58:13 ON 19 MAR 2003
L1            70 S HUMAN GELATIN
L2           102 S HUMAN (A) GELATIN
L3           102 S L1 OR L2
L4        124357 S KDA (P) 3
L5            11 S L3 (P) KDA
L6             4 DUPLICATE REMOVE L5 (7 DUPLICATES REMOVED)
L7            59 S BLOOM STRENGTH
L8             0 S L3 (P) L7
L9        108768 S GELATIN
L10           70 S L9 (P) HYDROXYLAT?
L11            0 S L10 (P) PERCENT?
L12            0 S L3 (P) NON-HYDROXYLAT?
L13           53 S GELATIN POLYPEPTIDE
L14            0 S L13 (P) (MIXTURE OR HOMOGENEOUS)
L15            7 S L3 (P) (HETEROGENEOUS OR MIXTURE)
L16            3 DUPLICATE REMOVE L15 (4 DUPLICATES REMOVED)
L17           16 S L3 (P) COLLAGEN
L18            8 DUPLICATE REMOVE L17 (8 DUPLICATES REMOVED)
L19            8 S L18 NOT L16 OR L6
L20            5 S L3 (P) COMPOSITION
L21            4 DUPLICATE REMOVE L20 (1 DUPLICATE REMOVED)
L22       127071 S ENDOTOXIN

=> s l9 (p) l22
L23         174 L9 (P) L22

=> s l23 (p) free
L24          12 L23 (P) FREE

=> duplicate remove l24
DUPLICATE PREFERENCE IS 'MEDLINE, CAPLUS, BIOSIS, EMBASE'
KEEP DUPLICATES FROM MORE THAN ONE FILE? Y/(N):n
PROCESSING COMPLETED FOR L24
L25            7 DUPLICATE REMOVE L24 (5 DUPLICATES REMOVED)

=> d l25 1-7 ibib abs

L25 ANSWER 1 OF 7 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
ACCESSION NUMBER: 2001:343068 BIOSIS
DOCUMENT NUMBER: PREV200100343068
```

TITLE: The local transfer of plasmid-mediated human inducible nitric oxide synthase gene with protein-coated metallic stents inhibits intimal hyperplasia following coronary angioplasty in mini-swine model.
AUTHOR(S): Dai Jun (1); Gao Runlin (1); Shi Ruiwen (1)
CORPORATE SOURCE: (1) Cardiovascular Institute and Fu Wai Hospital, CAMS and PUMC, Beijing, 100037 China
SOURCE: Zhonghua Xinxueguanbing Zazhi, (March, 2001) Vol. 29, No. 3, pp. 169-172. print.
ISSN: 0253-3758.
DOCUMENT TYPE: Article
LANGUAGE: Chinese
SUMMARY LANGUAGE: Chinese; English
AB Objective: To assess the effect of local transfer of plasmid-mediated inducible Nitric Oxide synthase gene using protein-coated metallic stents of inhibiting neointimal hyperplasia, after coronary angioplasty. Methods: The metallic stent was coated by cross-linked ***gelatin*** and mounted on 3.0 mm PTCA balloon, then ***endotoxin*** - ***free*** ultrapure plasmid pcDNA3hepiNOS was absorbed on the stent. Protein-coated stainless steel stents were used as controls. All stents were implanted into the middle segment of LAD. The ratio of balloon to vessel diameter was 1.1-1.3:1. Results: At the 7th day after stenting, RT-PCR and immunohistochemical staining confirmed the expression of iNOS mRNA and presence of its protein at gene transferred vessels (n=2), but there was no expression in remote organs. After 3 months of stenting coronary angiograms showed that there was no restenosis in all animal transferred plasmid pcDNA3hepiNOS (n=5) while restenosis developed in all animals of the control group (n=5). Morphometric analysis showed that lumen diameter loss (0.61+-0.30) mm vs (1.58+-0.31) mm (P<0.001), residual lumen diameter (1.00+-0.51) mm vs (0.36+-0.32) mm (P<0.05), neointimal area (1.65+-0.83) mm2 vs (2.83+-0.83) mm2 (P<0.05), mean percentage of area stenosis (26.45+-7.45) mm2 vs (94.2+-14.3) mm2 (P<0.001) were significantly less than those in control group. The proportion of the neointimal area to media area (I/M) reduced to 59.84% in pcDNA3hepiNOS group. Conclusions: Local plasmid mediated human iNOS gene transferred with protein coated metallic stents significantly inhibited intimal hyperplasia, which was usually a causative factor of retenosis after coronary angioplasty, in mini-swine model.

L25 ANSWER 2 OF 7 MEDLINE
ACCESSION NUMBER: 96010976 MEDLINE
DOCUMENT NUMBER: 96010976 PubMed ID: 8530850
TITLE: Experimental evaluation of a new gelatin-impregnated woven Dacron vascular prosthesis (CL301).
AUTHOR: Sasajima T; Inaba M; Azuma N; Koshiko S; Kubo Y
CORPORATE SOURCE: First Department of Surgery, Asahikawa Medical College, Japan.
SOURCE: NIPPON KYOBU GEKA GAKKAI ZASSHI. JOURNAL OF THE JAPANESE ASSOCIATION FOR THORACIC SURGERY, (1995 Sep) 43 (9) 1639-45.
Journal code: 19130180R. ISSN: 0369-4739.
PUB. COUNTRY: Japan
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: Japanese
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199601
ENTRY DATE: Entered STN: 19960220
Last Updated on STN: 19960220
Entered Medline: 19960126
AB We investigated the biological response and biodegradation of CL301, a presealed woven Dacron prosthesis (UBE woven) with glutaraldehyde stabilized ***gelatin*** . The sealant does not affect its handling characteristics because of the glycerin treatment. The total content of ***endotoxin*** in the CL301 was 5.3 +/- 0.5 pg/mg of sealant material (1.7 +/- 0.2 pg/cm2), which was 1/5 and 1/6 of that found in Hemashield and Gelseal, respectively. The pyrogen test was negative and the content was estimated below the minimum pyrogenic doses for thoracic aortic surgery. Five cm-long grafts with a diameter of 10 mm were implanted into the descending thoracic aorta of dogs weighing 10-16 kg. These grafts were retrieved 2 hours, 7, 10 days, 5, 8 and 10 weeks after implantation. Thrombus- ***free*** surfaces were 28%, 77%, at 5 and 10 weeks and there was no excessive inflammatory response to the sealant. The total,

and the effective sealant remaining were 80.6%, 56.5% at 5 weeks, 60.8%, 38.3% at 10 weeks, respectively. The sealant was removed more rapidly from the inner surface than from the outer. In half of the graft area, the sealant was removed or detached from the Dacron surface 5 weeks after implantation, indicating that delayed resorption of the sealant substantially did not affect the healing process. We conclude that because of the harmless amount of ***endotoxin*** and effective sealing for 5 weeks, followed by an acceptable healing process experimentally, CL301 is the presealed Dacron graft of choice for thoracic aortic surgery.

L25 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1982:428582 CAPLUS
DOCUMENT NUMBER: 97:28582
TITLE: Pertussis toxoid
INVENTOR(S): Syukuda, Yukio; Watanabe, Hideo; Matsuyama, Shigeo
PATENT ASSIGNEE(S): Takeda Chemical Industries, Ltd. , Japan
SOURCE: Eur. Pat. Appl., 14 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 47802	A2	19820324	EP 1980-108246	19801230
EP 47802	A3	19821229		
EP 47802	B1	19841010		
R: BE, CH, DE, FR, GB, IT, NL, SE				
JP 57050925	A2	19820325	JP 1980-127825	19800912
JP 01000928	B4	19890110		
NO 8100014	A	19820315	NO 1981-14	19810105
CA 1152001	A1	19830816	CA 1981-368112	19810108
DK 8100092	A	19820313	DK 1981-92	19810109
DK 155915	B	19890605		
DK 155915	C	19891023		
SU 1297712	A3	19870315	SU 1981-3235495	19810123
HU 30191	O	19840328	HU 1981-164	19810126
HU 185404	B	19850228		
ES 499112	A1	19820201	ES 1981-499112	19810204
GB 2083358	A	19820324	GB 1981-27421	19810910
US 4455297	A	19840619	US 1982-408563	19820816

PRIORITY APPLN. INFO.: JP 1980-127825 19800912
US 1981-229931 19810130

AB A pertussis toxoid with low toxicity and high potency is prepd. by removing ***endotoxin*** from the supernatant of a culture of a Bordetella pertussis phase I strain and flocculating (detoxifying) the pertussis exotoxin in the supernatant by addn. of H2CO [50-00-0] in the absence of basic amino acids. Thus, the culture fluid of an appropriate strain was purified by a combination of (NH4)2SO4 pptn., dialysis, and d.-gradient centrifugation. The ***endotoxin*** - ***free*** fluid obtained was dild. with phosphate-buffered saline to a protein N content of 50 .mu.g/mL, mixed with ***gelatin*** , Tween 80, and thiomersal, and then with H2CO, gradually increasing the H2CO concn. from 0.2 to 0.4% by vol. over 3 days and incubating for a total of 5 days. The flocculated toxoid suspension was dialyzed and used to prep. Al-pptd. vaccines. The potency of the vaccines was superior to that of vaccines prepd. with the addn. of L-lysine in the H2CO incubation step.

L25 ANSWER 4 OF 7 MEDLINE DUPLICATE 1
ACCESSION NUMBER: 80084556 MEDLINE
DOCUMENT NUMBER: 80084556 PubMed ID: 117672
TITLE: Adhesion and locomotion of human leukocytes in vitro; importance of protein coating; effect of lidocain, ethanol and endotoxin.
AUTHOR: Schreiner A; Hopen G
SOURCE: ACTA PATHOLOGICA ET MICROBIOLOGICA SCANDINAVICA. SECTION C, IMMUNOLOGY, (1979 Oct) 87 (5) 333-40.
Journal code: 7508469. ISSN: 0304-1328.
PUB. COUNTRY: Denmark
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English

FILE SEGMENT: Priority Journ
ENTRY MONTH: 198002
ENTRY DATE: Entered STN: 19900315
Last Updated on STN: 19980206
Entered Medline: 19800228

AB The adhesion of leukocytes to glass beads in protein- ***free*** media was quantitatively high and not dependent on divalent cations. Addition of plasma, albumin or ***gelatin*** in increasing concentrations gradually reduced leukocyte adhesion, which then became increasingly dependent on divalent cations. Heat inactivation of plasma did not affect leukocyte adhesion. Leukocyte migration in glass capillary tubes, which was dependent on a heat labile plasma factor, was promoted by each of the proteins listed and by siliconizing the tubes. Leukocyte migration in millipore filters was enhanced when albumin was present in the cell starting compartment. Lidocain reduced both leukocyte adhesion to protein-coated glass and leukocyte migration in capillary tubes and millipores filters. Ethanol reduced leukocyte adhesion and leukocyte filter migration. E. coli ***endotoxin*** enhanced adhesion of leukocytes but inhibited their migration in tubes and filters. The findings indicate the existence of a relationship between adhesion and migration of leukocytes.

L25 ANSWER 5 OF 7 MEDLINE DUPLICATE 2
ACCESSION NUMBER: 78000425 MEDLINE
DOCUMENT NUMBER: 78000425 PubMed ID: 20157
TITLE: The isolation and characterization of a colony stimulating factor from human lung.
AUTHOR: Fojo S S; Wu M C; Gross M A; Yunis A A
SOURCE: BIOCHIMICA ET BIOPHYSICA ACTA, (1977 Sep 27) 494 (1) 92-9. Journal code: 0217513. ISSN: 0006-3002.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 197711
ENTRY DATE: Entered STN: 19900314
Last Updated on STN: 19950206
Entered Medline: 19771125

AB Serum- ***free*** conditioned medium from human lung obtained at autopsy provides a rich source of colony stimulating factor which stimulates granulocytic and macrophagic colony growth in both mouse and human bone marrow. The appearance of the factor is enhanced by ***endotoxin*** and inhibited by either puromycin or actinomycin D. Human lung colony stimulating factor is stable at the pH range of 6.5-10 and temperature of 56 degrees C for 30 min. It is resistant to trypsin and neuraminidase but is sensitive to subtilisin, chymotrypsin and periodate. It shows heterogeneity on Sephadex gel filtration with two activity peaks having molecular weight of 200 000 and 40 000, respectively. Upon gel electrophoresis, human lung colony stimulating factor migrates in the alpha-globulin post-albumin region. Using the combination procedures of hydroxyapatite chromatography and preparative polyacrylamide gel electrophoresis a 600-fold purification was achieved with a final specific activity of 6-10(5) units per mg protein. The purified colony stimulating factor is very labile; however, the activity can be stabilized by the addition of ***gelatin*** or bovine serum albumin at the concentration of 0.1% and 0.2 mg/ml, respectively.

L25 ANSWER 6 OF 7 EMBASE
ACCESSION NUMBER: 78176600 EMBASE
DOCUMENT NUMBER: 1978176600
TITLE: The isolation and characterization of a colony stimulating factor from human lung.
AUTHOR: Fojo S.S.; Wu M.C.; Gross M.A.; Yunis A.A.
CORPORATE SOURCE: Dept. Med., Univ. Miami Sch. Med., Miami, Fla. 33152, United States
SOURCE: Biochimica et Biophysica Acta, (1977) 494/2 (92-99). CODEN: BBACAQ
COUNTRY: France
DOCUMENT TYPE: Journal
FILE SEGMENT: 029 Clinical Biochemistry
015 Chest Diseases, Thoracic Surgery and Tuberculosis
LANGUAGE: English

AB Serum- ***free*** conditi[redacted] medium from human lung obtain[redacted] at autopsy provides a rich sourc[redacted]f colony stimulating factor wh[redacted] stimulates granulocytic and macrophagic colony growth in both mouse and human bone marrow. The appearance of the factor is enhanced by ***endotoxin*** and inhibited by either puromycin or actinomycin D. Human lung colony stimulating factor is stable at the pH range of 6.5-10 and temperature of 56.degree.C for 30 min. It is resistant to trypsin and neuraminidase but is sensitive to subtilisin, chymotrypsin and periodate. It shows heterogeneity on Sephadex gel filtration with two activity peaks having molecular weight of 200,000 and 40,000, respectively. Upon gel electrophoresis, human lung colony stimulating factor migrates in the .alpha.-globulin post-albumin region. Using the combination procedures of hydroxyapatite chromatography and preparative polyacrylamide gel electrophoresis a 600-fold purification was achieved with a final specific activity of 6.cntdot.105 units per mg protein. The purified colony stimulating factor is very labile; however, the activity can be stabilized by the addition of ***gelatin*** or bovine serum albumin at the concentration of 0.1% and 0.2 mg/ml, respectively.

L25 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1958:26522 CAPLUS
DOCUMENT NUMBER: 52:26522
ORIGINAL REFERENCE NO.: 52:4819i,4820a
TITLE: Influence of perfusate characteristics on pulmonary vascular response to endotoxin
AUTHOR(S): Hinshaw, Lerner B.; Kuida, Hiroshi; Gilbert, Robert P.; Visscher, Maurice B.
CORPORATE SOURCE: Univ. of Minnesota, Minneapolis
SOURCE: Am. J. Physiol. (1957), 191, 293-5
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB The typical response to ***endotoxin*** of the isolated lung perfused with heparinized whole blood does not occur when ***gelatin*** or dextran is substituted as the perfusate. When plasma ***free*** from formed elements is used, the pulmonary vascular response to ***endotoxin*** is either minimal or does not occur. Lungs perfused with dextran, ***gelatin*** , and plasma were shown to be reactive by their response to test drugs and by their subsequent response to ***endotoxin*** during perfusion with heparinized fresh whole blood. It is believed that ***endotoxin*** does not have a direct effect on lung tissue but that some components of whole blood are required for the pulmonary vascular response.

=> d his

(FILE 'HOME' ENTERED AT 12:57:53 ON 19 MAR 2003)

FILE 'MEDLINE, CAPLUS, BIOSIS, EMBASE, SCISEARCH, AGRICOLA' ENTERED AT 12:58:13 ON 19 MAR 2003

L1	70	S HUMAN GELATIN
L2	102	S HUMAN (A) GELATIN
L3	102	S L1 OR L2
L4	124357	S KDA (P) 3
L5	11	S L3 (P) KDA
L6	4	DUPLICATE REMOVE L5 (7 DUPLICATES REMOVED)
L7	59	S BLOOM STRENGTH
L8	0	S L3 (P) L7
L9	108768	S GELATIN
L10	70	S L9 (P) HYDROXYLAT?
L11	0	S L10 (P) PERCENT?
L12	0	S L3 (P) NON-HYDROXYLAT?
L13	53	S GELATIN POLYPEPTIDE
L14	0	S L13 (P) (MIXTURE OR HOMOGENEOUS)
L15	7	S L3 (P) (HETEROGENEOUS OR MIXTURE)
L16	3	DUPLICATE REMOVE L15 (4 DUPLICATES REMOVED)
L17	16	S L3 (P) COLLAGEN
L18	8	DUPLICATE REMOVE L17 (8 DUPLICATES REMOVED)
L19	8	S L18 NOT L16 OR L6
L20	5	S L3 (P) COMPOSITION
L21	4	DUPLICATE REMOVE L20 (1 DUPLICATE REMOVED)
L22	127071	S ENDOTOXIN

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L23          174 S L9 (P) L22
L24           12 S L23 (P) FREE
L25            7 DUPLICATE REMOVE L24 (5 DUPLICATES REMOVED)

=> log y
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                      ENTRY    SESSION
FULL ESTIMATED COST                                   102.05     102.26

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                      ENTRY    SESSION
CA SUBSCRIBER PRICE                                    -8.46      -8.46

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